NCI CBIIT 2008 Training Accomplishments

Useful Links
- caBIG® Documentation and Training Workspace   - caBIG® Learning Management System (LMS)   - Wiki Notation Guide   - Training Team Calendar   - FAQs

Additional Resources
- caGrid Wiki   - caGrid Training Resources   - caBIG® Knowledge Centers

⚠️ **Wiki Tip**
Want to share the link to a wiki page? Do not copy the displayed URL. Instead, use the Tiny Link. The Tiny Link will work regardless of changes made to the page or page title.

NCI CBIIT 2008 Training Accomplishments

caBIG® Essentials Training

The Documentation and Training Workspace, with input from other members of the caBIG community, created an interactive caBIG® Essentials Overview training - designed for those who are new to the caBIG® Enterprise. This training provides an excellent, easy to comprehend overview of the caBIG® program, introduces caBIG® tools, describes different ways to connect with caBIG®, and points to additional resources to support specific next steps.

caBIG Essentials Overview (Adobe Flash format)
caBIG Essentials Overview MS PowerPoint Only

caBIG® Developer Boot Camps

During 2008, three intermediate, hands-on developer boot camps focused on the step-by-step process for developing, semantically integrating, and deploying caBIG™ applications and data services. 73 individuals from 35 organizations successfully completed the pre-requisites and intensive two-day boot camp.

For the first time, we had two international delegations attend the Developer Boot Camp. Those delegations included individuals from China *(Shanghai Center for Bioinformation Technology)* and India *(Center for Development of Advanced Computing).*

Organizations represented included:

- American College of Surgeons
- Cancer and Leukemia Group B
- Cancer Institute of New Jersey
- Cancer Research Center of Hawaii
- Center for Development of Advanced Computing (India)
- Dana Farber Cancer Institute

- Department of Health and Human Services
- Duke University
- Ekagra Software Technologies
- Federal Drug Administration
- Georgetown University Medical Center
- Genzyme Corporation
- Gulfstream BioInformatics
- Indiana University
- International Genomics Consortium
- Jackson Laboratory
- Lockheed Martin
- Massachusetts General Hospital
- Mayo Clinic Cancer Center
- Oracle
- National Cancer Institute
- National Cancer Institute Center for Bioinformatics
- National Institutes of Health
- Northrup Grumman
- SAIC
- ScenPro, Inc.
- Shanghai Center for Bioinformation Technology (China)
- Quantum Leap Healthcare Collaborative
- TerpSys
- Tessella
- University of California at San Diego, Moores Cancer Center
- University of Utah, Huntsman Cancer Institute
- Washington University in St. Louis, Siteman Cancer Center
- 3rd Millenium, Inc.
- The Wistar Institute

caCORE Expanded

The caCORE Training Curriculum has been expanded to include new courses and new roles. In addition to expanding the training curriculum we evaluated different training modalities (Articulate, Camtasia, Adobe Connect). Based on our evaluation of training modalities, learning theory, and participant needs, we have begun the process of updating existing materials to modalities that best match the content and learning needs.

With the recent upgrade of the caCORE applications to 4.0, caCORE training materials have been updated in conjunction with the caCORE 4.0 release.

Clinical Trial Management Systems Training

Clinical Trials Reporting Program (CTRP)

The purpose of the program is to establish a comprehensive database containing regularly updated information on all NCI funded interventional clinical trials. Grantees will be requested to enter specific information about each clinical trial into the database. NCI will use this information to coordinate research efforts to optimize our nation's investment in cancer research.

CTRP Pilot - Pilot Program began on 7/7/08 with 5 Pilot Sites

- Dana Farber
- Mayo
- Northwestern
- St. Jude
- Wake Forest

Phase I of the pilot consisted on hands on data entry of Protocol Registrations and Accrual Data.

Phase II focused on Batch Upload capacity of both applications.

TerpSys:

- Active participant in the Pilot Site Orientations prior to their participation in the Pilot.
- Sole POC for all application related questions/issues to be escalated to the CTRP CORE team.
- Member of the CTRP CORE team that heavily participated in meetings to discuss processes and resolve issues.
- Worked with the developers on application related issues/problems to resolve for the user community.
- Trained participants from all 5 Pilot sites on the Accrual application.

CTRP Production - Production launched on 01/05/09. Continues with the 5 above Pilot sites.

First quarter: most sites utilizing the hands on data entry of Protocol Registration.

Second quarter: will involve the Early Adopters to the Program (sites to yet be determined)

Third quarter: will involve the entire NCI sponsored Cancer Centers and NCI sponsored clinical trials.

Third quarter: will involve entering Accrual data, via hands on or batch upload.

Terpsys:

- Continue active participation with the Pilot Sites to resolve issues/questions resulting from the data entry process.
- Continue as sole POC for all application related questions/issues that are escalated to either the CTRP CORE team or the technical team.
- Continue as a member of the CTRP CORE team that heavily participated in meetings to discuss processes and resolve issues.
- Continue to work with the developers on application related issues/problems to resolve for the user community.
- Will be responsible for training all users interested in the hands on data entry process for the Accrual application.

Clinical Data System Web (CDS Web)

CDS - Web is a web based application which is the primary resource of clinical trial data for all of National Cancer Institute (NCI). CDS reports are submitted for all NCI sponsored trials (Phase 1, 2 and 3). This includes all:

- NCI sponsored Cooperative Group and Community Clinical Oncology Program (CCOP) Research Base treatment trials utilizing NCI supplied investigational agents and trials utilizing non-NCI agents (commercial or investigational).
- All NCI grant funded non-Cooperative Group (Cancer Center or other institution) trials (if CDS reporting is a grant requirement) utilizing non-NCI agents.
  All NCI sponsored Cooperative Group and CCOP Research Base non-treatment trials (accrual > 100 patients).
- The Abbreviated CDS Data Set is limited to protocol administrative and patient demographic information. The Complete CDS Data Set contains the information found in the Abbreviated CDS Data Set, patient administrative information (e.g., registering institution code, patient treatment status), treatment information (e.g., agent administered, total dose per course), adverse event information (e.g., Adverse Event type, grade), and response information (e.g., response observed, date response observed).

TerpSys:

- Trained new users on the functionality of the CDS Web applications for both Abbreviated and Complete Submissions.
- Re-trained existing users on the functionality of the application that had not previously received training.
- Main POC for all quarterly "Rejected" submissions. Worked with users on a quarterly basis to interpret their Error Log reports, resolve their rejected submissions and to submit successfully.

Cancer Central Clinical Database (C3D)

TerpSys:

- Provided training to new caBIG®, NCICB and SPOREs C3D users.
- Provided Tier2 support for users experiencing issues installing JInitiator and the PDF plug in to allow them to successfully open/view forms within the C3D Application.

Integrative Cancer Research Training

General Accomplishments

TerpSys®:

- Developed and presented the caArray deep dive for the 2008 AACR Annual meeting
- Helped plan, organize, and lead the Learning Center at the 2008 AACR Annual meeting
- Put together a Camtasia video of all of the application Demos (caArray, NCIA, and caGWAS) for the Learning Center

-This required the re-recording of NCIA and caGWAS and incorporated transitions as well as audio enhancements

caArray

caArray guides the annotation and exchange of array data using a federated model of local installations whose results are shareable across the cancer Biomedical Informatics Grid (caBIG™). caArray furthers translational cancer research through acquisition, dissemination and aggregation of semantically interoperable array data to support subsequent analysis by tools and services on and off the Grid.

caArray Releases and Training Updates by TerpSys® - Release of version 2.0 went live on 2/5/2008 which was an entirely new system

- v2.0 - 2/5/2008 - This was the release of the new system that replaced the v1.x system

-The caArray Application Overview was fully redeveloped to support this new system

- v2.0.1 - 4/8/2008 - This was a bug fix and feature release upgrade in the system

-The caArray Application Overview was updated to support the new features

- v2.1.0 - 8/13/2008 - This was a major bug fix and feature release upgrade in the system

-The caArray Application Overview was updated to support the new features

- v2.1.1 - 11/4/2008 - This was a bug fix and feature release upgrade in the system

-The caArray Application Overview was updated to support the new features

Institutions that Attended the caArray Application Overview:

- SAIC
- Baylor College of Medicine, Texas Medical Center
- ImClone Systems Incorporated
- City of Hope Medical Center
- University of Missouri-Columbia
- Our Lady of the Lake Regional Medical Center
- University of Pittsburgh Medical Center-Cancer Institute
- RTI International
- Feinstein Kean Healthcare
- National Cancer Institute Center for Bioinformatics
- Persistent Systems
- University of Minnesota Cancer Center
- Roswell Park Cancer Institute
- Columbia University - Herbert Irving Cancer Center
- Ohio State University Medical Center
- University of Arizona Cancer Center

Other

TerpSys®:

- Setup a training instance of caArray and will be using it for trainings, demos, and allow users to test without populating the production environment with test data

- Started development of MAGE-TAB training

REMBRANDT

The goals of REMBRANDT are to produce a national molecular/genetic/clinical database of several thousand primary brain tumors that is fully open and accessible to all investigators (including intramural and extramural), and provide informatics support to molecularly characterize a large number of adult and pediatric primary brain tumors and to correlate those data with extensive retrospective and prospective clinical data.

REMBRANDT Releases and Training Updates by TerpSys® - Only updates were released during 2008

- v1.5.1 - 3/17/2008 - This was a bug fix and feature release upgrade in the system

-The REMBRANDT Application Overview was updated to support the new features

Institutions that Attended the REMBRANDT Application Overview:

- RTI International
- Moffitt Cancer Center & Research Institute-Univ. So. Florida
- National Cancer Institute Center for Bioinformatics
- SAIC
- Feinstein Kean Healthcare
- Edward Hospital
- University of Illinois at Chicago

CGEMS/caGWAS

CGEMS/caGWAS allow researchers to integrate, query, report, and analyze significant associations between genetic variations and disease, drug response or other clinical outcomes. New breakthroughs in SNP array technologies make it possible to genotype hundreds of thousands of single nucleotide polymorphisms (SNPs) simultaneously, enabling whole genome association studies.

CGEMS/caGWAS Releases and Training Updates by TerpSys® - There were only data updates released during 2008

Institutions that Attended the REMBRANDT Application Overview:

- Moffitt Cancer Center & Research Institute-Univ. So. Florida
- Feinstein Kean Healthcare

Training Modules from D&T Workspace Participants

New Products from the caBIG® Documentation and Training Workspace - Winter 2008/2009

caGrid for Principal Investigators - A Short Guide - This 14-page word document provides a concise high-level introduction to caGrid specifically tailored for Principal Investigators.It is designed for people who are new to caBIG and caGrid, and provides the context and references needed for identifying next steps with the Grid in your environment. This product was authored by Columbia University, and is a joint work between the caBIG Documentation and Training Workspace and the caGrid Knowledge Center. Visit https://cabig-kc.nci.nih.gov/CaGrid/KC/index.php/PI/Program_Manager_Track

Creating caGrid Data Services: A Tutorial -- This a self-guided training module for Software Engineers creating a data service for caGrid. When completed in combination with hands-on activity, it takes approximately four hours to complete. This product was created by the University of Utah for the caBIG Documentation and Training Workspace. Access through the LMS or at https://gforge.nci.nih.gov/docman/view.php/196/16707/caGrid_data_service_tutorial.pdf

Essentials of caBIG® Compatibility: Introduction - This training provides an overview of the caBIG Compatibility Criteria. It introduces the compatibility criteria, outlines success criteria for making a software tool compatible with caBIG, and points to additional resources to support specific next steps. The training is designed for technical audiences charged with adapting a software tool to make it caBIG compatible, and assumes moderate technical knowledge, as well as preexisting knowledge about caBIG. This product was created by the Mayo Clinic and Duke University for the caBIG Documentation and Training Workspace. Access through the LMS or at https://gforge.nci.nih.gov/docman/view.php/196/16708/caBIG_Compatibility.ppt

Essentials of caBIG® Compatibility: From Theory to Practice - Semantic Annotation - This training provides an advanced look at caBIG® compatibility, focusing specifically on the practical issues associated with semantic annotation. It is designed for people who are already familiar with the caBIG® compatibility guidelines, and are looking for the next level of guidance related to semantic annotation. This product was created by the Mayo Clinic and Duke University for the caBIG® Documentation and Training Workspace. Access through the LMS or at https://gforge.nci.nih.gov/docman/view.php/196/16705/Theory_to_Practice_Semantics.ppt

Essentials of caBIG® Compatibility: From Theory to Practice - Metadata Reuse - This training provides an advanced look at caBIG® compatibility, focusing specifically on the practical issues associated with the reuse of metadata - e.g., Common Data Elements (CDEs). It is designed for people who are already familiar with the caBIG® compatibility guidelines, and are looking for the next level of guidance related to metadata reuse. This product was created by the Mayo Clinic and Duke University for the caBIG® Documentation and Training Workspace. Access through the LMS or at https://gforge.nci.nih.gov/docman/view.php/196/16706/Theory_to_Practice_CDE_Reuse.ppt

Migrating Legacy Data into caTissue: Methods and Case Studies - This white paper summarizes methods and case studies from different caTissue users for migrating legacy data into caTissue. This product was created by OHSU for the caBIG® Documentation and Training Workspace, and is available as a wiki page in the Tissue Banking and Pathology Tools Knowledge Center. Link: https://cabig-kc.nci.nih.gov/Biospecimen/KC/index.php/Migrating_Legacy_Data_into_caTissue:_Methods_and_Case_Studies

caBIG® Learning Management System

The caBIG Learning Management System (LMS) is the central catalog for training related to caBIG. There is a core version used by administrators and instructors and there is an online version used by students and instructors.

LMS Online Account Statistics

Total Trainee Records	1557
Total Online Accounts Created by Students	837
- Online Accounts Created in 2008	350
- Online Accounts Created in 2007	351
- Online Accounts Created in 2006	136

Boot Camp Registration Process

- The core version of the LMS has robust reports and email merge functions. We have begun using the LMS to handle the emails and prerequisite checking process for Boot Camp registration. This process has minimized the amount of administrative hours that are spent coordinating the Boot Camp registration process, which was done manually in the past
- Historically, an hour was spent on administrative duties per boot camp participant. With the first time using the LMS for the administrative process, an estimated 20 minutes was spend per participant. Going forward with the process in place, an estimated 10-15 minutes will be spent per participant, which saves at least 75% of the time previously spent on administrative registration duties.

LMS Upgrade

The caBIG LMS was upgraded this year to a new release of the software from Training Partner. This upgrade provided new functionality that helps streamline processes for both online and core users that enhance the usability of the system.

This new release provided the following new functionality on the online version:

- Tree structure for courses and roles makes viewing each in the catalogs less cluttered.
- Courseware launching window removed - Eliminates a confusing step for users when completing computer-based training modules.
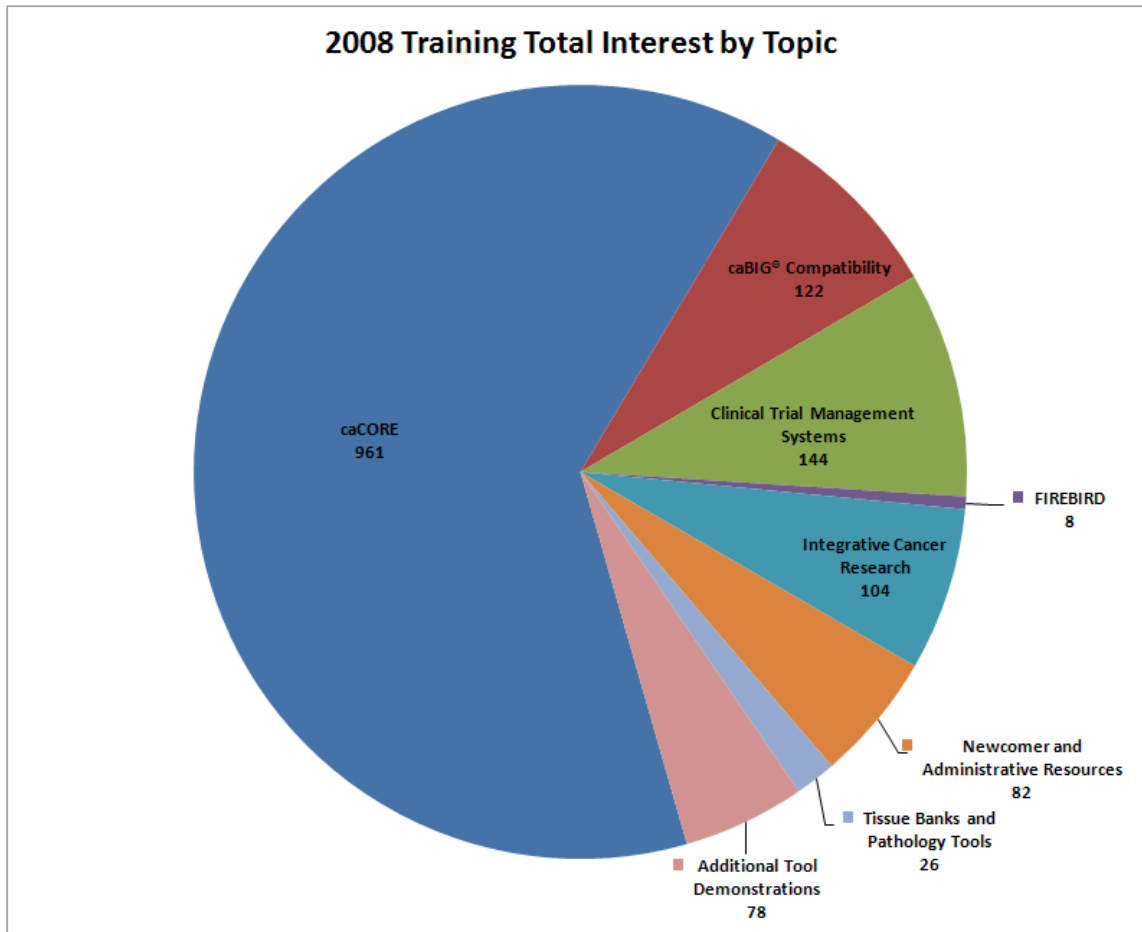
- Instructors can enroll students online if the student is already in the system.
- Instructor has the ability to view all of the classes they have taught through the class history calendar online.

This release provided more functionality for the administrators on the core version:

- Exam enhancement - Administrators have more customization options when creating a quiz. Quizzes were just blank pages with one question on it. The 2007 version allows pictures, text and other options.
- New built-in reports that we can customize for our needs.
- Forced testing on the test server before moving any customizations to the production server, which provides better records since changes are tracked by the system and there is an easier transition from test to production.

2008 Trainings Tracked in the caBIG LMS

The following chart shows the breakdown of total interest in trainings tracked through the LMS, including self-paced and instructor-led offerings. This totaled 1525 trainings:

2008 Training Total Interest by Topic

- caBIG® Compatibility 122
- Clinical Trial Management Systems 144
- caCORE 961
- FIREBIRD 8
- Integrative Cancer Research 104
- Newcomer and Administrative Resources 82
- Tissue Banks and Pathology Tools 26
- Additional Tool Demonstrations 78

Courses added to the caBIG LMS in 2008

caBIG® Compatibility

- Installing a caBIG® Application and a Functional Grid Node

caCORE

- Using Enterprise Vocabulary Services Self-Paced
- Introduction to the SIW Self-Paced
- Creating a Node on the Grid Self-Paced

Clinical Trial Management Systems

- Cancer Data Exchange (caXchange) Tool Demonstration
- Cancer Adverse Event Reporting System (caAERS) Tool DemonstrationC3PR Demo
- Cancer Adverse Event Reporting System (caAERS) Overview
- Cancer Central Clinical Participant Registry (C3PR) Tool Demonstration
- Cancer Clinical Trial Suite (CCTS) - Integrated Application Demonstration

- Patient Study Calendar (PSC) Overview
- Patient Study Calendar (PSC) Tool Demonstration

Integrative Cancer Research

- Introduction Demo to NCIA
- Introduction Demo to caArray
- Introduction Demo to caGWAS
- Overview of lpgLIMS 1.3

Newcomer and Administrative Resources

- Overview of caBIG® for the Nursing Community

Tissue Banks and Pathology Tools

- Installing caTissue and Deploying a Functional Grid Node
- caTissue Core Tool Demonstration
- caTissue e-Learning Portal
- caTissue Suite Tool Demonstration

Demos

This year marks the first year many of the tools recorded live demonstrations. These demonstrations are now available on the Learning Management System as courses. These demonstrations provide needed information in an easy to view format and are a great training resource.

The Learning Management System

Collaboration

As a sign of great progress, the Training group had the opportunity to collaborate with many different, organizations, institutions and colleagues to assist them in creating demos, fine tuning presentation materials, scripting materials for recording, as well as co-presenting materials at boot camps and meetings. By utilizing the training resources many of our collaborative partners were able to more efficeintly create, produce, record and deliver all their hard work.

Posters

The training team had our abstract accepted at the Biomedical Informatics Without Borders Conference. The training poster and abstract outlined our approach to "Connecting Skills to Learning Needs."

Biomedical Informatics Without Borders Poster - Connecting Skills to Learning Needs